MR FORM 4

Page 1 of 1

FILE NO. 120E/045/019

DATE: April 8, 1982

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1588 WEST NORTH TEMPLE
SALT LAKE CITY, UTAH 84116



DECLARATION OF EXEMPTION

DIVISION OF OIL, GAS & MINING

(See Mined Land Reclamation Act 40-8-4(6))

As provided for in Section 40-8-4 UCA 1953, I hereby declare an exemption from the "Utah Mined Land Reclamation Act", in that less than 500 tons of material is being mined or less than two (2) acres of land is being excavated or used as a disposal site during a period of twelve (12) consecutive months, from the following designated claims, leases, or fee acreage.

NAME OF CLAIM, LEASE, OR FEE ACREAGE	4,4 SECTION	LOCATION	RANGE	COUNTY	
DIATOM # 2, UMC 245004	$SE_{4}^{1} SW_{4}^{1} Sec.20$	The state of the s	8 W.	Tooele	
				100010	
Commodity: <u>Diatomaceous Earth</u>		1			
Date: April 8, 1982	Signature:	Trues.	9	-1	
	_ Signature.	James Dera,	Preside	nt	
OPERATOR: INDUSTRIAL EARTH	I PRODUCTS: (TWC.		U		
ADDRESS: 560 West 3615 South, Salt Lake City, Utah 84115					
ADDRESS: 560 West 3615 Sc	nith Solt Tara a.				

*This form needs to be filed one time only. In the event more than the minimum size requirements are mined, a Notice of Intention to Commence Mining Operations (MR Form 1) and a Mining and Reclamation Plan (MR Form 2) will need to be filed with this office.



MANLED ON

JNDUSTRIAL EARTH PRODUCTS, INC. 560 West 3615 Scuth Salt Lake City, Utah 84115 (801) 268-8892

March 8, 1982

Bureau of Land Management 136 East South Temple St. Salt Lake City, Utah 84111

Re: 3809.1-3 (Notice - Disturbance of 5 acres or less)

Dear Sir:

Notice of intent, pursuant to provisions of Subpart 3809.1-3 of Part 3800, Mining Claims Under the General Mining Laws, is hereby given that the undersigned, Industrial Earth Froducts, Inc., a Utah corporation, anticipates beginning a minimal mining operation on or about the 1st. day of May, 1982, as follows:

- (1) Industrial Earth Products, Inc., 560 West 3615 South, Salt Lake City, Utah 84115.
- (2) Mining claim subject to disturbance is: Diatom #2, UMC 245003-245027, in SE Corner of SW_{4}^{1} , Sec. 20, T 1 N., R 8W.SL.
- (3) The operation shall consist of surface mining to a depthof approximately 10 feet, over an area of less than 5 acres.

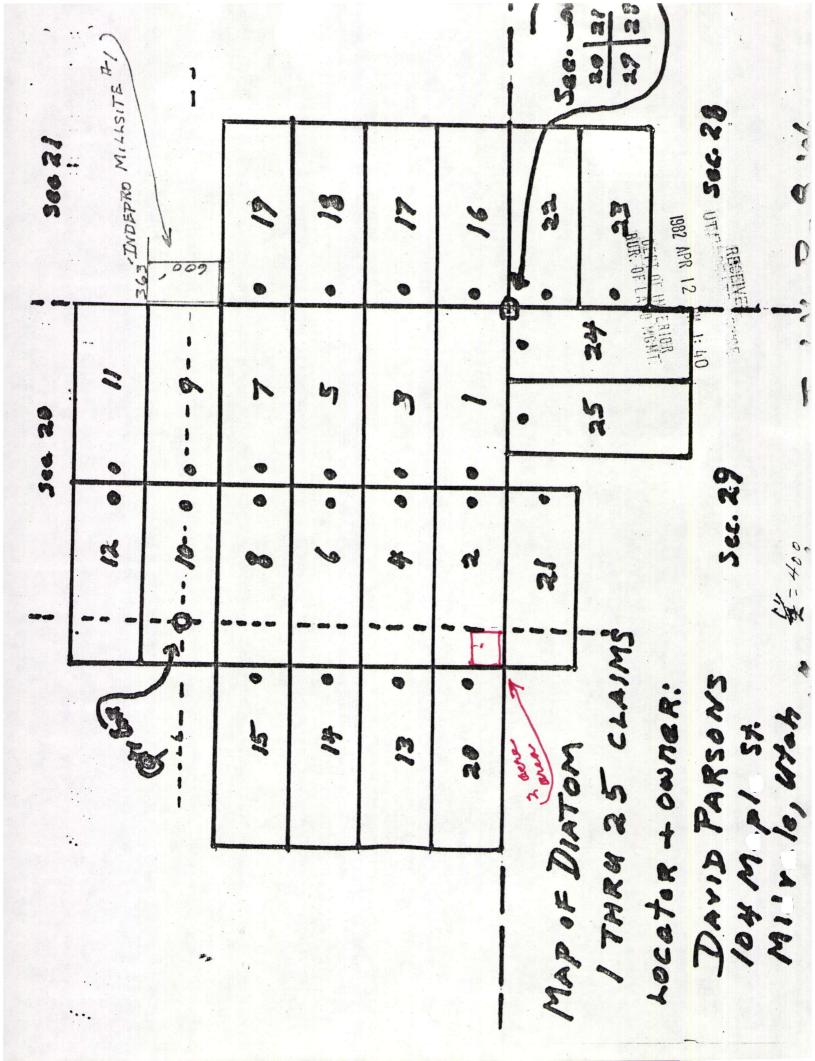
The proposed location is in the SE Corner of SW_{4}^{1} ; Sec. 20, Township IN., Range 8W, Salt Lake Base and Meridian.

There is an existing access road to the property. No additional roads are planned.

(4) Reclamation of all areas disturbed will be completed to the standard described in Par. 3809.1-3(d) and reasonable measures will be taken to prevent unnecessary or undue degradation of the federal lands during proposed operation.

Respectfully submitted,

James Defa, Fresident



RECLAMATION PLAN OF DISTURBED AREAS AND COSTS

RECLAMATION PLAN:

Residue of clay and sand, after separation of diatomaceous material, will be returned to the excavated area.

Top soil and mixed vegetation therein will be evenly distributed over the entire area, and lightly covered with gravel bearing soil to prevent wind damage.

Revegetation shall consist of the return of natural vegetation present in top-soil and re-seeding with approximately 10# of crested wheat seed broadcasted per acre. Then smoothed over with a drag.

Since we will be mining small areas of shallow depths at one time, a reclamation process will begin as we move ahead with the mining operation. This will reduce the distance necessary to move and return the top-soil to excavated area. This shorter period of removal will tend to lessen the removal of moisture content by sun and wind while stockpiled.

ESTIMATED (COSTS OF RECLAMATION: (per acre)	CURRENT COSTS	INFLATED PROJECTED COSTS
	Replacing top-soil	\$400.00	\$500.00
	Distribution of gravel bearing soil	175.00	200.00
	Re-seeding crested wheat	- 15.00	25.00
	Dragging reclaimed area	75.00	100.00
	Total Estimated Costs	\$665.00	\$825.00

MINING PROCEDURE & DESCRIPTION OF LAND:

Legal Description of Land To Be Mined:

SE Corner of $SW_{\frac{1}{4}}^{\frac{1}{4}}$ Section 20, T-1 N., R-8 W., Salt Lake Base & Meridian. General Description:

The terrain has a gradual down slope of about 3 to 5 degrees from west to east. Area is slotted with washes about 6 feet wide and 4 to 6 feet deep, which appear to carry little or no run-off. Vegetation is very sparse. Mostly grasses and sage brush.

MINING PROCEDURE:

Top soil and subsoil shall be removed by front-end loader to a depth of approximately 2 feet and stockpiled in a convenient adjacent location.

Thence, diatomaceous material shall be removed by front-end loader to a depth of approximately 6 feet and loaded into 10-wheel dump truck, or off-highway type dump vehicle and hauled approximately

3,000 feet to mill-site over mine type road.

Haulage road will be graded or water sprinkled, or treated in some manner to reduce fugitive dust.

OPERATIONAL PROCEDURE DIATOMACEOUS EARTH PROCESSING PLANT TOOELE COUNTY, UTAH

Diatomaceous earth material will be surface mined, after removal of from 1' to 2' of overburden, from the SE corner of the $SW^{\frac{1}{4}}$ of Section 20, Townwhip 1 N., Range 8 W., Salt Lake Base & Meridian, and transported approximately 3,600 feet by mine road to the processing plant located in Section 21, Township 1 N., Range 8 W., in the same township and range, at approximately 2,700 feet north and 100 feet east of the SW corner of Section 21.

The crude material will be stockpiled at the north-west corner of the proposed processing plant.

Crude material will then be loaded into a feed bin by front-end loader, and thence fed by auger into a 24' X 23" diameter rotary dryer. Dryer will be direct flame heated by oil or propane gas burner. Dried material will then pass, by gravity drop, into and through a pulverizer consisting of a series of three revolving reels, thence drawn into a dry material air-flow line by a material moving fan at approximately 2,000 C.F.M. - 18" W.C., and pass through air separators (classifiers) into a storage bin.

Air-flow will, in part, be recycled into the flow-line. The remainder will be passed into and through a Torit, cabinet-type dust collector, Model 140, or comparable model for dust particle removel.

Rejected material will be dropped into bins with one open side to be removed by front-end loader, and thence returned to excavated area at mine site.

The classified product will be fed, by auger, into a 64' X 3' diameter rotary kiln. Product will be calcined at 1600 degrees fahrenheit, by use of oil or propane gas burner, for a period of 20 minutes while passing through the kiln. Calcined material will thence be air separated to remove waste material by passing through additional classifier or classifiers in a procedure similiar to the air-flow line and material moving fan as used with dried material. Waste material will gravity drop into a bin for removal by front-end loader, to be returned to excavated area at mine site.

Finished product will pass to storage silo. Air from that flow-line will be used as in previous line, with remaining air being passed to another dust collector (bag house) as specified above for dust particle removal.

Finished product will be transported to pneumatic tankers pneumatically, with excess air and dust particles passing to finish product dust collector for collection of product and dust control.

This ore processing operation will not require the use of water or chemical additives of any type. Only the removal of sand and clay materials. The objective finished product is diatomite, to be marketed as a filter aid.

We believe there are no toxic elements contained in the crude ore or the final product. A full-rock analysis of the crude ore conducted by Rocky Mountain Geo-Chem, Salt Lake City, Utah, is attached hereto.

Scott M. Matheson Governor

STATE OF UTAH DEPARTMENT OF HEALTH

DIVISION OF ENVIRONMENTAL HEALTH

150 West North Temple, P.O. Box 2500, Salt Lake City, Utah 84110

Alvin E. Rickers, Director Room 426 801-533-6121

June 24, 1981 533-6108



James O. Mason, M.D., Dr.P.H. Executive Director 801-533-6111

DIVISIONS

Community Health Services Environmental Health Family Health Services Health Care Financing and Standards

OFFICES

Administrative Services Health Planning and Rolicy Development Medical Examiner State Health Laboratory David M. Parsons Industrial Earth Products Co. 6267 South 13th East, B Salt Lake City, UT 84121

> RE: Air Quality Approval Order for A Mineral Processing Plant in Tooele, County.

Dear Mr. Parsons:

On May 24, 1981, the Executive Secretary published a notice of intent to approve your mineral (diatomacious earth) processing plant with baghouse control.

The 30-day public comment period expired June 23, 1981 and no comments were received.

This air quality approval order authorizes the construction and operation of the control equipment and procedures as proposed in your notice of intent dated April 8, 1981, with the following conditions:

- 1. All emission control equipment shall be maintained in good operating conditions.
- 2. No visible emissions shall exceed 20% opacity as per Section 4.1.2, Utah Air Conservation Regulations (UACR). No gasoline powered vehicle shall emit visible contaminants except for starting motion no farther than 100 yards as per Section 4.1.3, UACR.
- 3. The two hoppers shall be enclosed on three sides and the top. The fourth side of each shall have an opening as small as practicable for entry of material feed.
- 4. The storage silo baghouse outlet grain loading shall not exceed 0.02 gr/dscf. The baghouse shall be made stack testable and shall be tested using EPA test methods 1-5 as requested by the Executive Secretary.

David M. Parsons page 2 June 24, 1981

- 5. The haul road and work areas of the front end loaders shall be water sprayed or chemically stabilized to minimize fugitive dusts as dry conditions warrant or as determined necessary by the Executive Secretary. A record/log shall be kept of all treatments including date, amount, and location and shall be made available to the Executive Secretary upon request.
- 6. The Executive Secretary shall be notified when start-up occurs as an initial compliance inspection is required.

Sincerely,

Brent C. Bradford

Executive Secretary

Utah Air Conservation Committee

LCB: jw

cc: Tooele Co. Health Dept. EPA Region VIII (N. Huey)

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ROCKY MOUNTAIN GEOGHEMICAL CORP.

1323 W. 7900 SOUTH • WEST JORDAN, UTAH 84084 • PHONE: (801) 255-3558

RMGC Numbers:

Local Job No. 82-04-40-SL

Certificate of Analysis

Date:

March 19, 1982

Client:

Industrial Earth Products

560 West 3615 South

Salt Lake City, Utah 84115

Attn: Dave Parsons

Client Order No.:

none

Report On:

1 Sand Sample

Submitted by:

Dave Parsons

Date Received:

3/11/82

Analysis:

Whole Rock Analysis and Soluble SO4

Analytical Methods:

Remarks:

enc.

file (2)

cc:

BGT/1w

Element	#I	Element	#I
% Ca0	16.1 Calcium Oxide	% S10 ₂	52.0 silian dioxie
% MgO	1.61 Magnesium Ox ide	% Al ₂ 0 ₃	5.67 Aluminiam Oxid
% MnO	0.026 Manganese Oxide	% LOI	18.3 Loss on ignition
% Fe ₂ O ₃	1.76 Ferric oxide	% P ₂ 0 ₅	0.006 Phosphorous
% Na ₂ 0	1.29 Sodium oxíde	% TiO2	0.228 Titanium Oxide
% K20	1.57 Potassium oxide	% Soluble SO4	2.23 Sulfate

By Byron Thomas

All values are reported in parts per million unless specified otherwise. A minus sign (—) is to be read "less than" and a plus sign (+) "greater than." Values in parenthesis are estimates. This analytical report is the confidential property of the above mentioned client and for the protection of this client and ourselves we reserve the right to forbid publication or reproduction of this report or any part thereof without written permission.

ND — None Detected

1 ppm — 0.0001%

1 Troy oz./ton — 34.286 ppm

1 ppm — 0.0292 Troy oz./ton